

What is claimed is:

1. A polymerizable composition obtainable via:

5 a) reaction of

A) from 0.5 to 5 parts by weight of at least one silicon compound of the formula (I):



10 where each R^1 , independently of the others, is an alkenyl or cycloalkenyl radical having from 2 to 12 carbon atoms and optionally having one or more ester groups,

15 each R^2 , independently of the others, is an alkyl or cycloalkyl radical having from 1 to 12 carbon atoms,

each X, independently of the others, is a halogen atom or an alkoxy group having from 1 to 6 carbon atoms,

20 m is a whole number greater than or equal to 1,

n is a whole number from 1 to 2^*m+1 ,

o is a whole number from 0 to 2^*m ,

r is a whole number from 0 to m-1,

25 s is a whole number from 1 to 2^*m+1 , and where m, n, o, and s comply with the relationship (1):

$$n + o + s = 2^*m + 2 \quad (1)$$

30

with

B) from 0.01 to 2.0 parts by weight of water, and

35 C) from 0 to 4.0 parts by weight of at least one acid;

and

b) then adding

D) from 0.5 to 5 parts by weight of at least

one (meth)acrylate of the formula (II)

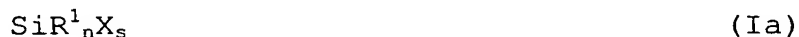


5 where R³ is a hydrogen atom or a methyl group, and R⁴ is an aliphatic or cycloaliphatic radical having from 1 to 20 carbon atoms and having at least one hydroxy, thiol, primary amino, secondary
10 amino, and/or one epoxy group,

E) from 98.99 to 55 parts by weight of at least one polymerizable ethylenically unsaturated monomer other than D),

15 F) from 0 to 30 parts by weight of at least one polymer and/or copolymer which is obtainable via polymerization or, respectively, copolymerization of at least one ethylenically unsaturated monomer E).

20 2. The composition as claimed in claim 1, obtainable by using at least one silicon compound of the formula (Ia)

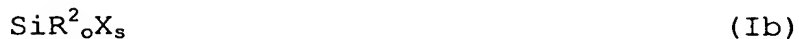


25 as silicon compound A).

30 3. The composition as claimed in claim 1, obtainable by using a mixture comprising at least one silicon compound of the formula (Ia)



and at least one silicon compound of the formula
(1b)



5

instead of the silicon compound A).

4. The composition as claimed in at least one of the
preceding claims, using at least one silicon
compound of the formula (Ic)

10



as silicon compound A).

15

5. The composition as claimed in at least one of the
preceding claims, obtainable by using γ -methacryl-
oxypropyltriethoxysilane, γ -acryloxypropyltri-
ethoxysilane, γ -methacryloxypropyltrimethoxy-
silane, γ -acryloxypropyltrimethoxysilane and/or
vinyltriethoxysilane as silicon compound A).

20

6. The composition as claimed in claim 5, obtainable
by using γ -methacryloxypropyltriethoxysilane as
silicon compound A).

25

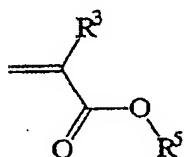
7. The composition as claimed in at least one of the
preceding claims obtainable, by carrying out the
reaction a) at a temperature in the range from 0
to 100°C.

30

8. The composition as claimed in at least one of the
preceding claims, by carrying out the reaction a)
until a homogeneous solution is obtained.

35

9. The composition as claimed in at least one of the preceding claims, obtainable by carrying out the reaction a) for from 15 minutes to 48 hours.
- 5 10. The composition as claimed in at least one of the preceding claims, obtainable by using at least one hydroxyalkyl (meth)acrylate, aminoalkyl (meth)acrylate, oxiranyl (meth)acrylate, and/or mercaptoalkyl (meth)acrylate, as (meth)acrylate D).
- 10
11. The composition as claimed in claim 11, obtainable by using glycidyl (meth)acrylate as (meth)acrylate D).
- 15
12. The composition as claimed in at least one of the preceding claims, obtainable by using at least 50% by weight, based on the total amount of ethylenically unsaturated monomers E), of at least one (meth)acrylate of the formula (III) as ethylenically unsaturated monomer E)
- 20



(III)

- 25 where R³ is a hydrogen atom or a methyl group, and R⁵ is a aliphatic or cycloaliphatic radical having from 1 to 20 carbon atoms.
13. The composition as claimed in claim 12, obtainable by using at least 50% by weight, based on the total amount of ethylenically unsaturated monomers E), of methyl methacrylate as ethylenically unsaturated monomer E).
- 30

14. The composition as claimed in at least one of the preceding claims, characterized in that at least one impact modifier is used as polymer and/or copolymer F).
- 5
15. The composition as claimed in at least one of the preceding claims, characterized in that use is made of a mixture composed of from 0.1 to 10 parts by weight of at least one impact modifier and from 10 29.9 to 20 parts by weight of at least one linear or branched polymer and/or copolymer, as polymer and/or copolymer F).
16. The composition as claimed in at least one of the preceding claims, characterized in that it also comprises from 0.01 to 5 parts by weight of at least one lipophilic free-radical polymerization initiator.
- 15
17. A polymer obtainable via polymerization of a composition as claimed in at least one of claims 1 to 16.
- 20
18. A laminated glass composed of a transparent plastics core and of two glass panes securely bonded thereto, where the plastics core is obtainable via polymerization of the composition as claimed in at least one of claims 1 to 16.
- 25
19. The laminated glass as claimed in claim 18, characterized in that the plastics core has a thickness in the range from 1 to 200 mm and the glass panes have a thickness in the range from 0.1 to 3 mm.
- 30
20. A process for producing a laminated glass as claimed in claim 18 and/or 19, characterized in
- 35

that the composition as claimed in at least one of claims 1 to 16 is incorporated into a composite and exposed to polymerization conditions.

5 21. The process as claimed in claim 20, characterized in that the composition is devolatilized prior to the polymerization process.

10 22. The use of a laminated glass as claimed in claim 18 and/or 19 for windows, roof windows, glass doors, conservatories, greenhouses, noise barriers, aquariums, display cases, sales counters, security display cases, display windows, and/or balcony parapets.

15